

Abstract

The present invention relates to a method and system for efficiently identifying errant
5 processes in a computer system using an operating system (OS) error recovery method that
identifies if the error caused by the errant process can be recovered and, if so, can recover from
the error. The method and system of the present invention operates after standard Error
Correcting Code (ECC) and parity check bit methods and systems are unsuccessful in recovering
from the error. In accordance with an embodiment of the present invention, the method and
10 system includes detecting an error during instruction execution, storing a physical address of an
errant process that caused the error, and storing an execution instruction pointer (IP) in an
interruption instruction pointer (IIP). The method further includes determining a first virtual
address from an operating system mapping table, determining a second virtual address from a
translation look-aside buffer, and identifying the errant process, if the physical address and the
15 second virtual address match the physical address and the first virtual address.